

## CLAIMS

What is claimed is:

1. A device comprising:  
an imager including at least a set of sensor elements; and  
a fiber plate cover disposed on the set of sensor elements.
2. The device as in claim 1, wherein said fiber plate cover is configured to transfer an image of a sample in contact with an outer surface of said fiber plate cover to said set of sensor elements.
3. The device as in claim 2, wherein the size of said sample in said transferred image is equal to a size of said sample in an image reaching said outer surface.
4. The device as in claim 2, wherein said imager captures an image with illumination reaching said imager from the direction of said sample.
5. The device as in claim 2, wherein said fiber plate cover is an only separation between said sample and said set of sensor elements.
6. The device as in claim 1, wherein said fiber plate is configured to coherently transfer said image onto said set of sensor elements.
7. The device as in claim 1, wherein said fiber plate cover is to magnify an image passing through said fiber plate cover.
8. The device as in claim 1, comprising a removable slide configured to hold a sample.
9. The device as in claim 8, wherein said removable slide comprises a fiber plate.
10. The device as in claim 1, comprising an interaction chamber.
11. The device as in claim 10, comprising an indicator disposed in said interaction chamber, said indicator capable of reacting with a sample.
12. The device as in claim 11, wherein said imager is to detect a color produced by said reaction.
13. The device as in claim 10, wherein said interaction chamber comprises a selectively permeable membrane.
14. The device of claim 1, wherein said device is configured for passing through a body lumen.

15. The device as in claim 1, wherein said device is an autonomous in-vivo device.
16. The device as in claim 1, wherein said fiber plate cover is in direct contact with said imager.
17. The device as in claim 1, comprising a shell surrounding said device, wherein the shell comprises a fiber plate cover.
18. The device as in claim 1, comprising a battery.
19. An autonomous in vivo device comprising:
  - an imager; and
  - a fiber plate cover disposed on sensor elements of said imager, said fiber plate cover to transfer to said sensor elements an image of an object in contact with said fiber plate cover.
20. The device as in claim 19, wherein said fiber plate cover is comprised of optical fibers aligned in parallel.
21. The device as in claim 19, wherein said fiber plate cover is to coherently transfer light onto said sensing element.
22. The device as in claim 19, comprising an interaction chamber configured for containing a sample.
23. The device as in claim 22, wherein said interaction chamber includes an indicator, said indicator capable of reacting with said sample.
24. A method of imaging, comprising capturing with an imager an image of a sample in contact with a fiber plate cover on said imager.
25. The method of claim 24, comprising enclosing said sample in an interaction chamber contiguous to said fiber plate cover.
26. The method of claim 24, comprising magnifying said image with said fiber plate cover.
27. A microarray analysis device comprising:
  - an imager;
  - a fiber plate cover disposed on said imager; and
  - an interaction chamber for containing a sample;
  - wherein said fiber plate cover is configured to transfer an image of the sample to said imager.

28. The device as in claim 27, wherein said interaction chamber includes an indicator capable of reacting with said sample, said reaction detectable by said imager.
29. The device as in claim 27, comprising a selectively permeable membrane.
30. The device as in claim 29, wherein said fiber plate cover is integral with said interaction chamber.